

**The Impact of a Sensory-Based Parent Coaching Program on the Occupational
Performance of Toddlers with Developmental Disabilities**

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Acknowledgements

Throughout the completion of my capstone experience, I have received a great deal of support and guidance from numerous individuals.

I would like to thank Abby DeHoff for sharing her immense knowledge as a practicing occupational therapist in early intervention and for mentoring me throughout my capstone experience. I would also like to thank the many therapists, staff members, and families at Kids Only, Inc. who welcomed me and supported my project.

I could not have completed this project without the support of faculty members: Dr. Jayson Zeigler for helping me develop the project design and methodology, Dr. Anthony Chase for helping me get the project started and complete the IRB process, and Dr. Victoria Garcia-Wilburn for all her guidance and mentorship over the past 3 years.

Finally, I would like to thank my husband and parents for their love and support and my sister, Ashley Holland, for encouraging me to pursue a career in healthcare.

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Abstract

Sensory processing challenges are common in children ages 0 to 3 receiving early intervention services and interfere with the occupational performance of children during family mealtimes, playtimes, self-care activities, and community outings. This program utilized 9 to 10 in-home parent coaching sessions to implement sensory strategies addressing parent identified occupational performance problems with 6 families. Pre- and post-test results indicated a significant improvement in parent ratings of child performance and parent satisfaction following the parent coaching program. This study adds to the growing body of evidence supporting the use of parent coaching strategies when working with pediatric populations and specifically demonstrates the potential value of the coaching model in implementing sensory strategies.

Keywords: parent coaching, sensory, early intervention

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Kids Only, Inc. is a provider of early intervention services to children ages 0-3 in Central Indiana. Indiana's early intervention program is called First Steps. It provides infants and toddlers with developmental delays and disabilities with a variety of services including speech, physical, developmental, and occupational therapies (State of Indiana, FSSA, 2018). Recently, First Steps of Indiana has been transitioning to the use of parent coaching strategies to improve therapy outcomes for families especially in social emotional skills. The development of social emotional skills is often directly linked to sensory processing and both are needed for self-regulation (Kuypers, 2013). Many children served by KOI therapists are at increased risk for sensory processing challenges due to histories of trauma, adverse childhood experiences, pre-term birth, Autism Spectrum Disorder, and developmental delay (Ben-Sasson et al., 2013; Donkers et al., 2020; Fraser et al., 2017; Mitchell et al., 2014). Sensory processing challenges are a relatively new concepts for many parents and have many complexities that can make supporting a child difficult (e.g. Ben-Sasson et al., 2013). Therefore, occupational therapists at KOI can assist families through coaching parents in sensory-based strategies to increase occupational performance. The purpose of this capstone project is to develop a program for implementing sensory-based parent coaching with children receiving early intervention services and assess the initial outcomes of the program on the children's occupational performance. The case examples from the program will then be presented to practicing therapists at KOI to expand their ability to effectively implement sensory-based strategies within the multidisciplinary parent coaching model.

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Needs Assessment

Interview Process

The introductory interview was completed with the site mentor in July 2019. The details of this interview can be seen in **Appendix A**. The mission of the organization, the target population, characteristics of the population, and the kinds of programming offered have been identified (Fazio, 2017). Indiana's Part C Theory of Action was included in the needs assessment. It states the strategy of improving home visiting practices to improve family engagement with the outcome of children improving in social-emotional skills. (State of Indiana, 2018). These goals are within the OT scope of practice because of focus on the child's context within the family and social participation. Potential project ideas initially included gathering more in-depth information from parents regarding current perceptions of therapy and needs, researching occupational therapy best practices to increase parent engagement and social-emotional skills, creating parent training materials regarding child social-emotional skills, and advocating for OT referrals to address social-emotional health especially in response to trauma.

A second interview was completed with the director of Kids Only, Inc. The reason for interviewing the director was to gain a broader picture of the needs of the organization. The interview was useful to confirm the need for improved parent engagement and social-emotional skills. The questions asked are available in **Appendix B**.

The questions were chosen to identify the greatest needs within the organization. The second interview aided in pinpointing areas for improvement and a focus for the project. Possible gaps in services were determined, such as lack of parent-engagement, a lack of knowledge regarding sensory processing, and decreased social-emotional skill development. The second interview helped determine which gaps the organization prioritized and the feasibility of different

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strategies for bridging those gaps. The results of the interview indicated implementing parent coaching to be a strong priority for the organization.

Community Profile

The community profile was examined to determine which topics of parent coaching would be most relevant. Kids Only, Inc. is in Marion County and serves families in nearby and surrounding counties. Marion County is significantly more diverse than the state of Indiana on average. In 2019, the Marion County population was 33% black, 17% Hispanic, and 51% white (Indiana Youth Institute, 2019). The central Indiana area is also home to many refugees including one of the largest Burmese Chin populations outside of Myanmar (Burma) (Price, 2020). The diverse population served by early interventionists at Kids Only, Inc. requires culturally competent, family-centered services to be provided.

In 2019, Marion County's child poverty rate was 26.5%, 20 of every 1,000 children experienced abuse or neglect, and 5,927 children were placed in a foster home (Indiana Youth Institute, 2019). Children living in low socio-economic communities are more likely to experience higher numbers of adverse childhood experiences and trauma which are linked to changes in sensory processing patterns (Howard et al., 2020). The March of Dimes grading scale rates Indiana's preterm birth rate (10.2%) a C- and Marion County's preterm birth rate (11.2%) a D- (March of Dimes, 2021). Pre-term infants are also at risk for sensory processing difficulties (Mitchell et al., 2014). KOI therapists need evidence-based interventions to support families with sensory processing concerns.

Policies and Initiatives

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The policies and current initiatives of First Steps of Indiana were reviewed to ensure the project was aligned with the organization's vision. The Indiana Family and Social Services Administration has developed a plan to improve the First Steps program called Indiana's Part C State Systematic Improvement Plan (State of Indiana FSSA, 2018). The plan includes improving home visiting practices to increase family engagement and child social-emotional skills. As part of implementing this plan, the FSSA has offered early intervention provider trainings on the use of parent coaching strategies with an emphasis on family engagement and empowerment. The coaching process begins with the assessment team collecting information on family routines, strengths, and concerns using the Indiana First Steps Family Assessment form. However, information on the Family Assessment form is often limited and parent concerns change rapidly as infants and toddlers develop. A literature search was completed in addition to the interview, community profile, and policy review to gain knowledge into specific techniques to implement parent coaching, promote social-emotional skills, and address sensory processing challenges.

Literature Review and Gap Analysis Statement

Current research supports increasing family engagement as best practice in early intervention services (Stoffel et al., 2017). A systematic review of research in early intervention found coaching to be a widely used and accepted method of intervention with positive outcomes (Ward et al., 2020). However, research studies on the subject frequently lack operationalized definitions, have poor reporting of therapist training, and use of coaching principles, and do not include outcome measures of parent capacity (Ward et al., 2020).

Coaching can be defined as:

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An adult learning strategy in which the coach promotes the learner's (coachee's) ability to reflect on his or her actions as a means to determine the effectiveness of an action or practice and develop a plan for refinement and use of the action in immediate and future situations (Rush and Sheldon, 2011, p. 8)

Rush and Sheldon defined 5 components of the coaching process including: joint planning, observation, action/practice, reflection, and feedback (2011). A survey of early intervention providers found that feedback and reflection were the least used practice components (Meaden et al., 2018). Furthermore, Trivette et al., analyzed 4 adult learning theories that contained key practice characteristics for implementing coaching including: introducing the material; illustrating the usefulness of the material; providing practice opportunities to apply the material or knowledge; evaluation of learning; reflection; and mastery (2009).

The material introduced in parent coaching programs is dependent upon parent selected goals. Previous parent coaching programs have found parent concerns to include self-care and play (Dunn et al., 2012). Dunn and colleagues found that nearly half of all parent goals were self-care related including dressing, eating, sleeping, and hygiene (2012). Other parent concerns include attending medical appointments, riding in vehicles, and transitions between home, school, daycare, etc. 24% of parent goals were related to play and leisure. ADLs including toileting, feeding, and sleep can be addressed using parent coaching strategies. Parents have been successfully coached in methods to manage child behaviors at feeding time and provide positive repeated exposures to target foods (Gronski & Doherty, 2019a). Strategies for toilet training such as increasing fluid-intake, keeping a schedule, and providing positive reinforcement are often successfully taught to and utilized by parents and caregivers (Gronski & Doherty, 2019b). Parents can implement sleep interventions provided to them by OTs such as preparatory routines

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and camping out to improve their child's sleep and their personal sleep (Doherty & Gronski, 2019). Parent coaching for ADLs improves the entire family's participation in routines (Gronski & Doherty, 2019a). Certain occupational therapy programs train early interventionists in family engagement as best practice including routines-based therapy and embedded coaching (Elenko, 2019).

Dunn and colleagues (2012) showed that parent coaching can improve child participation and parental sense of competence. The study used a program that included 3 elements: authentic settings, family routines, and child sensory processing patterns. The program occurred in families' homes to ensure authentic settings and observe family routines. Family priorities for child participation were identified using the Canadian Occupational Performance Measure (COPM). Child sensory processing patterns were identified using the Sensory Profile 2. The study was conducted with parents of children with a diagnosis of Autism Spectrum Disorder ages 3-10 years. Growing research has shown many children with developmental delays, not just children with autism spectrum disorder, experience challenges in occupational participation related to sensory processing patterns (Donkers et al., 2020). Furthermore, sensory processing challenges can occur in infants and toddlers (Mitchell et al., 2014). Therefore, there is a need to research the efficacy of a parent coaching program with sensory components for infants and toddlers with developmental delays.

Sensory Processing in Early Childhood

Young children are often referred to occupational therapists due to sensory processing difficulties that prevent them from participating in important daily activities (Shonkoff & Phillips, 2000). The term self-regulation refers to a combination of abilities including: sensory processing, emotional regulation, cognitive regulation, and social perspective taking (Kuypers,

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2013). Sensory processing is an important component of self-regulation and is therefore vital for development of social-emotional skills. Sensory processing can be defined as the ability of the brain to organize sensory information to create appropriate and functional responses (Mitchell et al., 2014).

Sensory processing difficulties are experienced by more than 1 in 20 children (Miller et al., 2014). Sensory processing difficulties are commonly associated with autism spectrum disorder (ASD) and sensory over-responsivity accounts for between 39%-45% of family impairment and family stress in this population (Ben-Sasson et al., 2013). Pre-term birth has also been shown to increase the risk of sensory processing difficulties in many children (Mitchell et al., 2014). Pre-term infants are born before their sensory systems fully develop and are exposed to overwhelming and noxious stimuli in the hospital which is likely to lead to sensory over-responsivity (Mitchel et al., 2014). Furthermore, research of electroencephalograms of children have shown smaller sensory processing brain responses and more severe sensory abnormalities in children with developmental delay compared to typically developing children (Donkers et al., 2020).

Sensory processing patterns in toddlers and infants impact sleep patterns, eating habits, and motor performance (Celik et al., 2017; Chistol et al., 2018; Vasak et al., 2015). Sensory processing challenges make basic activities of daily living frustrating, may cause high levels of stress for parents, and negatively impact parent-child interactions (Ben-Sasson et al., 2013; Walbam, 2019). Parent coaching including sensory strategies may help alleviate stress within the family unit and improve interactions and the child's occupational performance.

Parent-Child Interaction

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Parent-child attachment is a key aspect of socioemotional development in early childhood. A study by Wilbam (2019) found that sensory processing plays a key role in establishing attachment and sensory processing difficulties are correlated with lower attachment scores. Parents in the study described their children's secure attachment responses which included: making eye-contact, exploring the environment, smiling during hugs, and following behind the parent. The parents described insecure responses related to sensory processing difficulties including not soothing in response to touch, rocking, or sound. Children with sensory processing difficulties demonstrated an unwillingness to explore the environment and meltdowns when the parent left the room. Specific areas of sensory processing that are correlated with attachment are tactile sensitivity, auditory filtering, and responsiveness to stimuli (Wilbam, 2019). Early intervention programs should work to improve parent-child attachment by addressing sensory processing challenges.

Parent-child interactions often occur while participating in play and it can be very valuable for parents to become an encouraging partner in their child's play (Rogers & Dawson, 2010, p. 102). Interaction through play allows parents to gain their child's attention, promote communication, teach social skills and turn taking, explore sensory preferences, and develop social routines (Rogers & Dawson, 2010, p. 102-114). Children with sensory processing challenges experience delays in social play skills, decreased time spent interacting with toys, and favor toys that meet a sensory need (Watts et al., 2014). Modifying toys by embedding sensory preferences into them has been shown to increase functional play in toddlers (DiCarlo et al., 2009). Parents of children with sensory processing challenges may need training to find their child's play preferences which may include traditional toys, toys that are visually or auditorily

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stimulating, or physical play (Rogers & Dawson, 2010, p. 103). The occupation of play is an excellent opportunity for sensory-based intervention.

Sensory-Based Intervention

Ayres sensory integration theory recommends providing children with sensory processing difficulties with a “just-right challenge” to create positive experiences while engaged in sensory exploration (Ayres et al., 2005). Ayres sensory integration therapy requires programs to include a specific set of structure and process elements whereas many early interventions programs utilize some of the principles of sensory integration theory in a sensory-based approach (Case-Smith et al., 2015). Blanch et al. (2016) found that an early intervention program held in a sensory-enriched environment that included swings, tactile media, and climbing equipment improved cognitive, language, and gross motor skills in children with sensory processing challenges. The program included sensory integration process elements such as physical safety, presenting sensory opportunities, promoting self-regulation, challenging motor skills, providing a “just-right challenge”, and establishing a therapeutic bond. Parents received monthly in-home consultation from therapists and training throughout the program.

Research on education and training for parents of children with sensory processing challenges is limited but has shown positive initial results (Miller-Kuhaneck & Watling, 2018). Parent education and training has been shown to increase positive outcomes for both the parent and child in shorter periods of time than traditional child-centered interventions (Miller-Kuhaneck & Watling, 2018). Parent-implemented sensory strategies have been shown to improve attachment, fussiness, and self-regulation in children ages 7-24 months with sensory processing challenges (Jorge et al., 2013). Parent-implemented strategies can be effective when appropriate training has been provided to ensure safety and efficacy.

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Promoting Self-Regulation

Sleep and activity patterns in toddlers can impact the development of self-regulation. High levels of sleep and physical activity paired with relatively low levels of sedentary activity are important for toddler development (Kuzek and Carson, 2016). The World Health Organization (2019) offers guidelines for children ages 0-3 for sedentary time, physical activity, and quality sleep. For infants, physical activity means incorporating play in prone (tummy time) throughout the day and limiting time restrained (car seats, strollers, etc.) to less than 1 hour at a time (WHO, 2019). For toddlers, at least 180 minutes of physical activity should be incorporated into each day, less than 1 hour at a time should be spent restrained, and 2-year-olds should have less than 1 hour of screen time. These guidelines are associated with better motor, cognitive, and psychosocial development (WHO, 2019). Kuzek and Carson (2016) found that limiting sedentary activity to short periods at a time is associated with healthy BMIs in toddlers. They concluded “long periods of sedentary behavior may not offer ideal stimulation for adaptation” (Kuzek & Carson, 2016). Parent coaching sessions should therefore incorporate many physical activities and share these guidelines with parents.

A systematic review of interventions used by occupational therapists to address sensory processing concerns found that cognitive interventions including social stories and the Alert Program promoted self-regulation (Pfeiffer et al., 2019). Additionally, leisure interventions including sensorimotor activities (e.g. horseback riding and yoga) promoted self-regulation (Pfeiffer et al., 2019).

Determining the Gap

Toddlers qualifying for First Steps services through KOI are at increased risk for sensory processing challenges that may negatively impact their occupational performance including self-

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care, play, and family interactions. Due to the complex and individual nature of sensory processing patterns, coaching these families in effective sensory strategies can be difficult. Research regarding the effects of sensory-based parent coaching interventions on the occupational performance of infants and toddlers with developmental disabilities is limited. Furthermore, practicing therapists lack detailed case examples for implementing sensory-based strategies using a multidisciplinary parent coaching model. The purpose of this project is to provide a detailed example of a sensory-based parent coaching program, measure and report the efficacy of the program, and share resources with practicing occupational therapists.

Driving Theory and Conceptual Model

Adult Learning Theory: Constructivism

Development of a parent coaching program requires application of adult learning theory, specifically the constructivist theory of learning. Constructivism states that learning is the process of developing an understanding of experiences and creating a sense of meaning (Merriam & Bierema, 2014, p. 43). Children with developmental delay may demonstrate sensory behaviors and occupational performance issues that are confusing to parents. A better understanding of child development, sensory processing, and available supports may allow parents to understand and give meaning to their child's behaviors. The constructivist theory emphasizes that new learning builds on the prior knowledge of individuals. Therefore, parent coaching should be individualized, and baseline knowledge should be considered. The constructivist approach utilizes experiential learning and reflection (Merriam & Bierema, 2014, p. 45). Parents must be given frequent opportunities to apply knowledge to interactions with their child and receive constructive feedback to improve future interactions.

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Dunn's Model of Sensory Processing

Dunn's Model of Sensory Processing was used to educate parents on their child's sensory processing patterns throughout this project (Dunn, 2007). Dunn's model is based on two interacting concepts including neurological thresholds and self-regulation. Neurological thresholds are the amounts of stimuli a person requires to respond to a sensory input. A low neurological threshold may result in an individual noticing too much sensory stimuli, having difficulty filtering out what is most important, and becoming overwhelmed. A high neurological threshold may result in an individual missing or failing to notice important sensory stimuli. Dunn's model describes self-regulation as a behavioral construct on a continuum from passive to active. An example of passive self-regulation is remaining in a noisy environment despite feeling uncomfortable, whereas an active strategy may involve avoiding the noisy environment all together. From these two interacting concepts, the model derives four sensory processing patterns: seeking (high neurological threshold and active self-regulation), avoiding (low neurological threshold and active self-regulation), sensitivity (low neurological threshold and passive self-regulation), and registration (high neurological threshold and passive self-regulation).

Ayres' Sensory Integration

Sensory integration is the process of organizing information detected by the senses in the brain (Ayers, 2005). Meaning is given to the sensory experience by sorting information and identifying what should be focused on. Sensory integration allows us to react to the experience with an adaptive response (Ayers, 2005). Adaptive responses are purposeful and goal-directed forming the foundation for learning and social behavior (Ayers, 2005). Sensory integration interventions can be used to promote adaptive responses through providing sensory

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opportunities, providing just-right challenges, allowing the child to participate in choosing activities, guiding self-organization, supporting optimal arousal, using a play-based approach, maximizing child success, ensuring safety, arranging the room to engage the child, and building the therapeutic relationship (Parham et al., 2007).

Capstone Plan and Process

Goals and Objectives

The goals and objectives for this project can be seen in the student learning plan in **Appendix C**. The primary goal of the project is to create and implement a program to provide sensory strategies to toddlers using the parent coaching model. To increase sustainability of the project, resources and materials used will be made available to therapists at KOI. Occupational performance of the toddlers will be measured at baseline and at completion of the program to test the efficacy and add to the body of research supporting the implementation of sensory strategies through parent coaching. Updates to goals and objectives have been made and can be seen with an * indicating the change on the student learning plan.

Evaluation Plan

This research study uses two assessments including the Canadian Occupational Performance Measure (COPM) and the Toddler Sensory Profile 2. The COPM will be administered during week 1 and 9 sessions of the program to measure changes in the occupational performance of the toddlers. The Toddler Sensory Profile 2 will be administered during week 2 of the program with that assessment being used primarily to educate parents on their child's sensory processing patterns.

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The COPM asks parents to identify the most important problem areas in occupation performance for their toddlers in areas of self-care, productivity, and leisure. The COPM has previously been used successfully to measure parent satisfaction and perceptions of child's occupational performance (Carswell et al., 2004). A systematic review found the COPM to consistently demonstrate satisfactory to excellent reliability, validity, and responsiveness (Carswell et al., 2004).

The Toddler Sensory Profile 2 is a parent questionnaire that assesses child sensory processing patterns using Dunn's Model of Sensory Processing. Sensory processing patterns are divided into 4 quadrants for sensory processing: seeking, sensitivity, avoiding, and registration (Dunn, 2014). The Toddler Sensory Profile also contains sensory scores including: general, auditory, visual, touch, movement, oral, and includes a behavioral section (Dunn, 2014). All processing sections of the Toddler Sensory Profile 2 demonstrate good internal consistency with a Cronbach's alpha $>.70$ (adequate) with the range being from $.74-.80$ (Dunn, 2014). The sensory sections have lower internal consistency ranging from $.57$ to $.73$. Test-retest reliability is high for all sections ranging from $.83$ to $.92$. Content validity for the Toddler Sensory Profile 2 was developed using feedback from a large sample of practicing occupational therapists and an expert review panel (Dunn, 2014). However, construct validity data is limited due to few assessments to compare to that measure toddler sensory processing specifically. A comparison of the Toddler Sensory Profile 2 and the Vineland-II Parent/Caregiver Rating form found scarce significant correlations (Dunn, 2014).

Project Implementation

Participants

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7 families volunteered to participate in the program, however 1 family was excluded due to the child receiving services with foster parent. This family received additional parent coaching on sensory strategies to supplement First Steps services but was excluded from research. 7 parents participated including 6 mothers and 1 father. 6 children participated, 5 males and 1 female. The median age at the start of the program was 23.5 months with an age range of 8 months to 34 months. All children presented with significant developmental delays qualifying them for First Step services (20% below the mean in 2 areas of development or 25% below the mean in 1 area of development). All parents were agreeable to actively participating in sessions with their child and were English speaking due to lack of translator services for 9 consecutive weeks. Participant demographics were 31% African American and 69% Caucasian. A major limitation of the project was the lack of Hispanic and Burmese participation likely due to the English language requirement.

Recruitment Process

Institutional Review Board Approval was obtained from Indiana University under protocol # 2009770689. A flyer (**Appendix D**) was used for recruitment and provided to families by their current early intervention therapist along with a brief description of the program prior to the start of the capstone experience. Families who expressed interest and were agreeable to having a student present in the therapy session completed a First Steps form indicating it was okay to have a student present. The student researcher then thoroughly reviewed the informed consent form (**Appendix E**) with the family in person and allowed ample time for any questions. Once the informed consent was obtained the program began the following week.

Timeline of Events

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Week 1. The weekly schedule for this project generally consisted of Mondays offsite with Tuesdays through Fridays spent onsite. Week 1 consisted of a review of project materials and concepts to prepare for explaining the project to families. Then Tuesday-Friday was spent becoming oriented with the site, meeting families, and obtaining informed consent. Onsite time was spent with both families participating in the project and additional families gaining advanced clinical skills in areas such as infant and toddler feeding and sensory regulation.

Week 2. The Redcap project page was created to begin entering participant data. Initial interviews were conducted with the parents using the Canadian Occupational Performance Measure. Appropriate next milestones were discussed for children and family routines and areas of concern were thoroughly discussed. Information was exchanged regarding typical development and the child's condition to assist parents in setting expectations. Most families were at this stage in week 2, however it is important to note, due to absences and make-up appointments some families were at different stages of this timeline on different dates.

Week 3. The manual for administration of the Toddler Sensory Profile 2 was reviewed. The Toddler Sensory Profile 2 was completed with parents. This process took most of the session to complete the assessment and thoroughly review the results with the parent and answer related questions. The student researcher primarily focused on administering the assessment with the parent while the family's early intervention therapist worked with the child on therapy as usual.

Weeks 4-6. Mondays were primarily used as opportunities to prepare for the weeks therapy sessions through research and locating useful resources for families. Therapy sessions through the week utilized the 5 components of parent coaching: joint planning, observation, action/practice, reflection, and feedback. Parents were provided with resources relevant to their child's occupational performance goals. A list of resources shared with parents and providers at

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KOI is available in **Appendix F**. Therapy sessions would begin with reflection on the week with questions simply starting with “How was your week?” and then elaborating with open-ended questions regarding strategies that were tried, what went well, any doctor’s appointments, any new skills that had emerged, etc. Therapy sessions worked to model the use of sensory strategies for learning and self-regulation as appropriate for individual children. Tools like movement breaks and heavy work activities were incorporated into sessions with parents actively participating in movement games and naming ways their child was getting proprioceptive and vestibular input throughout the day already and ways to incorporate more heavy work into routines. Parents were also given specific strategies regarding their child’s sensory processing patterns. When discussing things that worked/did not work with the child, follow-up questions were asked about the sensory environment to prompt consideration. Sensory-rich activities were incorporated into sessions varying greatly by child but including: animal walks, bubbles, toys with visual, auditory, and textural components, food play, tunnels and obstacle courses, bean bag tossing, social play with swinging and spinning, and sensory bins. Child interests were followed throughout the sessions and parents were encouraged to offer children reasonable choices such as in food selection and toy selection. Sensory strategies were paired with observation of family routines and cognitive strategies for some families such as use of a First-Then visual schedule and use of a visual timer. For example, one parent expressed interest in a social story for her child and created a unique one for toileting with an app suggested by the student researcher. Additional sensory components were added to the story such as stomping feet up the stairs or listening to a song on the toilet. Several sessions were missed or completed via telehealth during these weeks due to illnesses and weather.

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Weeks 7-8. Mondays for weeks 7-8 changed slightly, shadowing of 2 different therapists occurred including a developmental therapist and speech language pathologist. It provided the opportunity to learn more about the multidisciplinary early intervention team and provide consultation for families who were not receiving occupational therapy services but were interested in some sensory strategies for their children. Program sessions continued and the “Family Check-in” form was introduced with a few families to ensure all the aspects of parent coaching were being included in sessions. New activities were introduced including making homemade playdough with household ingredients and games with a scooter board. One mother decided to purchase a Sensi Tool for her child’s feeding so her sessions primarily focused on beginning to use this tool and her child’s feeding routine. Several make-up sessions were needed at this time and were completed in conjunction with the student researcher and the family’s physical therapist and speech language pathologist.

Weeks 8-13. Mondays on weeks 8-13 consisted of development of the “Provider Survey of Family Routines” (**Appendix G**) with feedback from the site mentor, 2 speech language pathologists, 1 physical therapist, and 1 developmental therapist. A brief recorded presentation describing the project, takeaways for early intervention practice, and uses of the form that was sent to the director of Kids Only, Inc. to share with the organization. Collaboration occurred with the state First Steps team to develop a joint presentation of IU OTD student projects for the First Steps conference in June. This presentation will help to ensure sustainability of the project by educating practitioners on the strategies used and providing case examples for practice.

All coaching sessions were completed with families during this time. Multiple families shared feedback during sessions regarding community outings to the zoo, children’s museum, and park with the provider to reflect and discuss which learned strategies generalized well into

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the community. Session activities included developing seated balance in a family's ball pit, vestibular activities using a blanket and the couch, an indoor practice egg hunt to prepare for the family's big egg hunt at the park, and shaving cream art. 2 families regularly included siblings in therapy sessions providing excellent opportunities for coaching parents on advocating for their child's sensory needs to siblings, provide sensory-rich activities and heavy work activities to siblings too, and teaching siblings to respect each other's communication.

The COPM re-assessment was completed during session 9 (5 families) or 10 (1 family). 1 family completed the COPM at the start of session 10 for logistical reasons. Progress on goals were discussed and priorities were identified for early intervention services moving forward.

Week 14. Week 14 focused on analyzing results of the project and sharing finalized parent/provider resource list (**Appendix F**) with the organization.

Project Evaluation and Results

The change in performance and satisfaction from the initial and re-assessment of the COPM was analyzed to determine program efficacy. Parents initially identified 26 occupational performance areas (3-5 per family) that impeded their child's participation in 5 categories on the COPM. All parent-selected occupational performance problems fell into 5 categories on the COPM including self-care (potty training, eating/feeding, brushing teeth), household management (picking up toys, following simple instructions), community management (transitions, tolerating new people/places, self-regulation in the community), play (joint attention, grasping and manipulating toys, sharing, and taking turns with siblings), and functional mobility (crawling). Previous research from outcome studies of various populations and interventions has shown that increases of 2 points or more on the COPM indicate a clinically

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important difference (Law et al., 2014). Using the 2-point metric, a clinically important increase was seen in 19/26 areas in performance and 17/26 areas in satisfaction. Ratings of both performance and satisfaction increased on average across participants by +2.97 points. This increase is similar to recent research involving occupational performance coaching completed by Kahjoogh and colleagues with parents of children diagnosed with cerebral palsy (2019). That parent coaching program reported a +2.93 increase in performance and +3.31 increase in satisfaction. Table 1 provides a summary of t-test results.

Table 1

COPM performance and satisfaction scores at pre-test and post-test.

	Pre-test Mean	Post-test Mean	Mean Difference	Standard Deviation	t	Sig. (2- tailed)
Performance	2.57	5.53	2.97	+/- 1.76	-4.131	.009
Satisfaction	3.18	6.15	2.97	+/- 2.37	-3.061	.028

Although the Toddler Sensory Profile 2 was not used as an outcome measure in this study, it is important to note the sensory processing patterns of the child participants to raise awareness regarding the frequency of sensory processing challenges among this small sample of children in the First Steps program. Every child participant had a different sensory profile with no two children demonstrating the exact same sensory patterns. All children (6/6) had at least 1 category on the Toddler Sensory Profile 2 that was 1 SD from the majority of their peers. The majority of children (4/6) had at least 1 category that was 2 SD from the majority of their peers.

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Common sensory processing challenges included over responsivity to touch (4/6), avoidance (4/6), and over responsivity to routine changes (3/6).

Discussion and Impact

The results of this study indicate that there is a need for early intervention providers to address sensory processing due to the prevalence of sensory processing challenges in the children served by the First Steps program. Furthermore, this preliminary research indicates that the parent coaching model may be an effective method of addressing sensory processing challenges and implementing sensory strategies to support occupational performance. This research is unique in that it included children receiving early intervention services but was not limited to children with a diagnosis of Autism Spectrum Disorder (e.g. Dunn et al., 2012). Research into the application of occupational performance coaching in the 0–3-year-old population is also very limited as many studies have focused on the school-age population (e.g. Kahjoogh et al., 2019; Dunn et al., 2012; Graham et al., 2013).

This program looked at how parent coaching could be used to implement sensory strategies within Indiana's multidisciplinary early intervention program, First Steps. This program was delivered primarily in-person with 2 sessions delivered via telehealth due to poor weather and family illness. Additionally, sessions were primarily implemented in conjunction with the early intervention occupational therapy provider, but several sessions were completed with the families' physical therapy provider and speech therapy provider. This was useful in applying sensory strategies across multiple contexts and to support holistic development of skills. Furthermore, one of the strengths of this study was its emphasis on making sensorimotor play easily accessible to a diverse population of families. This study provided many activities that could be performed using household items like making old sock bean bags, stacking plastic

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cups, homemade playdough, animal walks, using furniture in an obstacle course, couch trampoline, and shaving cream art. Parents were encouraged to participate in many sensorimotor activities in the community between sessions and some chose visiting local parks and the children's museum using the Access Pass available to children receiving Hoosier Healthwise insurance .

It is important to recognize the limitations of this research and potential opportunities for further research. The variety of services and community resources utilized by families outside of the program sessions likely had an impact on progress towards goals making it hard to determine how much of child performance improvements were due to participation in the sensory-based parent coaching program. Furthermore, this program lacked some of the fidelity measures used in other parent coaching programs such as recording the sessions to determine how much time is spent coaching (Dunn et al., 2012). Further research would benefit from inclusion of a control group, larger sample size, and measurement of use of coaching strategies and sensory integration elements during sessions.

Sustainability

The COPM was a helpful tool to guide open-ended interviewing for creation of family centered short-term goals. However, the COPM uses language originally written to focus on adult categories of occupation and does not include a specific emphasis on areas of concern for early interventionists like family routines, strengths, and weaknesses. Therefore, the "Provider Survey of Family Routines" was created to support conversations with families and new providers, fieldwork students, etc. The "Provider Survey of Family Routines (**Appendix G**)" was shared with all providers at KOI along with a 1-page sensory resource list (**Appendix F**). The resource lists offer information to parents, providers who are unfamiliar with sensory processing,

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and providers looking to gain more advanced understanding of sensory integration. It also captions each resource and summarizes its value. These materials were emailed directly to the director of KOI and adjusted with her feedback to be shared with all KOI providers.

The model of parent coaching is sustainable for the families involved. It emphasizes parent education and parent use of intervention strategies that allow the parent to continue to advocate and meet their child's sensory needs after the program ends. Project experiences were shared with leaders at the First Steps state organization to share case experiences from the program to help them gain a better understanding of implementation of policies at the provider level. A shared collaboration between this research and research of family focus groups completed at the state level will be presented at the state First Steps Conference to further educate current early intervention providers.

Conclusion

Many infants and toddlers receiving early intervention services experience sensory processing challenges that impact their ability to participate in certain occupations with their families. Sensory strategies can be successfully implemented using the parent coaching model and may positively impact parent ratings of child occupational performance and parent satisfaction. Elements of this parent coaching program included: educating parents in sensory processing, making observation of sensory processing patterns, coaching parents in sensory interventions, reflecting, and providing feedback. Further research including a larger sample size, a control group, and increased fidelity measures would be useful to further determine program efficacy.

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Appendix A

1. What could you glean about the site's strategic goals?
 - The goal of Kids Only is to provide quality therapy services to children ages 0-3 regardless of income. Kids Only seeks to do this through therapy in naturalistic settings such as the home or daycare. Kids Only is part of the larger organization, Noble who seeks to enhance opportunities for individuals with disabilities.
2. What's working well at the site/with the partners?
 - Kids Only therapists are having success with interventions in feeding and sensory behavior.
3. What assets does your DEC organizational partner bring stakeholders?
 - Kids Only works under the umbrella of Noble which can provide many more services and resources than a First Steps program alone. Kids Only has many different therapy providers included SLP, PT, and DT to incorporate a variety of therapy styles and perspectives. Kids Only receives funding through First Steps.
4. Where are there gaps?
 - Kids Only does not currently receive referrals solely for trauma or mental health but therapists believe increased mental health services and early intervention mental health training for parents would be beneficial for many of their young clients. Parents do not always participate in therapy as often as is recommended, increasing participation may be beneficial but feasibility would have to be assessed. Therapists are not provided with translator services when they really need them.
5. How do you think OT can support the stakeholders in this project to achieve their goals?
 - I think OT could develop trainings for incorporating trauma-informed care and mental health care into early intervention treatments. In addition, OT could seek a grant for Noble to provide services solely for mental health related needs to children in the early intervention age group.

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Appendix B

1. Is there a method of measuring parent engagement, learning, and satisfaction with therapy?
Do you receive this type of data as an organization?
 - a. If not, would developing an assessment for this be helpful for informing therapy practice?
2. Are therapists being given resources on how to engage parents? Would additional resources be helpful?
3. Are therapists given resources to train parents on developing social-emotional skills with their children? Are parent handouts and training materials available?
 - a. If not, would parent training material on developing social-emotional skills with their children be useful to the organization?
4. Are therapists implementing trauma-informed care? What does this look like at Kids Only, Inc.?
5. Are parents and guardians of children at risk for social-emotional delays due to trauma aware of the benefits of OT and early intervention services?
 - a. Could outreach to high risk populations (foster parents/adoptive parents) on how to develop social-emotional skills and when to make referrals to organizations like Kids Only, Inc. be beneficial?
6. Is there a method for supplying low-income families with therapeutic resources? For example, foods to try in eating programs, toys that address multiple senses, other therapeutic supplies.
7. What ideas do you have? How could OTs role be improved or expanded to better serve the families of 0-3 year olds in Indianapolis?

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Appendix C**Student Learning Objective 1:**

I will provide information exchange with parents in an inclusive manner through principles of health literacy, consideration of cultural norms, and accommodation of language barriers.

Student Learning Objective 2:

I will apply evidence-based practice to support participation in occupations of early childhood through the occupational performance coaching model.

Student Learning Objective 3:

I will advocate for the promotion of health and well-being among children with sensory processing difficulties through the education and training of parents and therapists.

Project Goal 1:

Identify, create, and organize resources for therapists to efficiently exchange information with parents regarding sensory processing.

Objective 1:

Identify and/or create resources regarding typical development, condition and impairments, task analysis, teaching and learning strategies, community, and other resources.

***Objective 2:**

Develop an organizational system making resources easily available for distribution to families including binder/folder for therapists and shared folder on-line for multimedia. Update: Develop a resource list for therapist with resources that were used throughout the coaching program and hyperlinks when available.

Objective 3:

Increase accessibility of resources considering low-literacy levels and language barriers using audio recordings, images, and translations when available.

Project Goal 2:

Create in-service training or video to educate therapists on how to utilize sensory processing resources within the occupational performance coaching model.

***Objective 1:**

Inform therapists of the role and training of OTs in sensory processing and how sensory processing applies to other therapists (PT, SLP, DT). Update: Provide example template and training on use of parent interview to create and update family goals based on areas of concern in occupational performance.

Objective 2:

Describe the process elements of occupational performance coaching, the ways in which elements are currently used in the early intervention model, and how to apply OPC to sensory-related goals.

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Objective 3:

Provide de-identified case examples and project data from Goal 3 to support the use of sensory strategies within the occupational performance coaching model.

Project Goal 3:

Create and implement an occupational performance coaching program with a focus on children's sensory processing needs and opportunities to enrich the sensory environment to promote learning.

***Objective 1:**

Recruit 20-30 volunteer participants from families receiving services at KOI through email to all KOI service providers including explanatory flyer or video for providers to show to families. Update: Recruit 5-10 volunteer participants from families receiving services at KOI through explanatory flyer.


Objective 2:

Develop and follow protocol for providing structured processes, emotional support, and information exchange as outlined in the occupational performance coaching model in conjunction with the family's regular in-home service visits.

***Objective 3:**

Evaluate sensory processing needs through the Infant Toddler Sensory Profile and program outcomes through pre-post assessment of parent rating of child performance and parent satisfaction using the Canadian Occupational Performance Measure. Update: Infant Toddler Sensory Profile changed to Toddler Sensory Profile 2.

Appendix D



“Spring into Sensory”

If you are a parent of a child currently receiving early intervention services through Kids Only, Inc. you may qualify for this fun and playful research study!

This research program uses a sensory-based parent coaching model.

The sensory based approach means the researcher will provide training, education, and fun activities that address the child’s senses (taste, sight, smell, touch, etc.). The parent coaching model will allow parents to lead their child’s therapy and be actively involved in doing learning activities with their child.

This study provides parents with an opportunity to learn more about their child’s development, specifically how children learn through exploring the world around them with their senses.

Parent and child pairs will participate in 9 sessions during their regularly scheduled therapy appointments through Kids Only, Inc.

Participants will receive the opportunity to:

- Learn about the topic of sensory development
- Set personal goals for therapy sessions
- Complete a sensory profile with their child
- Engage in fun developmental activities

Location


- This study will take place during your regularly scheduled weekly therapy sessions with your Kids Only, Inc. therapist, wherever they are currently occurring (in your home or via telehealth).

Are you eligible?

- Parents and children ages 0-3
- Currently receiving speech, occupational, physical, or developmental therapy through Kids Only, Inc.
- Parents available and able to actively participate in weekly [60 minute](#) therapy sessions for 9 weeks

If you’re unsure if you meet the requirements, call or email a member of the study team:

- Hannah Stoll, Occupational Therapy Doctoral Student
- hstoll@iu.edu
- 812-787-1181



IUPUI
SCHOOL OF HEALTH & HUMAN SCIENCES
Department of Occupational Therapy

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Appendix E**INDIANA UNIVERSITY INFORMED CONSENT STATEMENT FOR RESEARCH**

“The Impact of a Sensory-based Parent Coaching Program on the Occupational Performance of Toddlers with Developmental Disabilities.”

Hannah Stoll, Occupational Therapy Student, IUPUI

Tony Chase, Assistant Professor, Department of Occupational Therapy, IUPUI

Jayson Zeigler, Visiting Clinical Assistant Professor, Department of Occupational Therapy, IUPUI

IRB Protocol # 2009770689

ABOUT THIS RESEARCH

You are being asked to participate in a research study. Scientists do research to answer important questions which might help change or improve the way we do things in the future.

This consent form will give you information about the study to help you decide whether you want to participate. Please read this form, and ask any questions you have, before agreeing to be in the study.

TAKING PART IN THIS STUDY IS VOLUNTARY

You may choose not to take part in the study or may choose to leave the study at any time. Deciding not to participate, or deciding to leave the study later, will not result in any penalty or loss of benefits to which you are entitled, and will not affect your relationship with Indiana University-Purdue University Indianapolis or Kids Only, Inc.

Please review the rest of this document for more details about this study and the things you should know before making a decision about whether to participate in this study.

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WHY IS THIS STUDY BEING DONE?

The purpose of this study is to study the impact of a sensory-based parent coaching model for children receiving early intervention services through Kids Only, Inc. The sensory based approach means the researcher will provide training, education, and fun activities that address the child's senses (taste, sight, smell, touch, etc.). The parent coaching model will allow the parent/guardian to lead their child's therapy and be actively involved in doing learning activities with their child.

You were selected as a possible participant because your child is age 0-35 months and currently receiving occupational, physical, speech, or developmental therapy services through Kids Only, Inc.

The study is being conducted by Hannah Stoll, Occupational Therapy Doctoral Student, IUPUI, Tony Chase, Assistant Professor, Department of Occupational Therapy, IUPUI, and Jayson Zeigler, Visiting Clinical Assistant Professor, Department of Occupational Therapy, IUPUI. This study is not receiving any outside funding.

HOW MANY PEOPLE WILL TAKE PART?

If you agree to participate, you will be one of up to 35 parents/guardians and 35 children participants taking part in this research.

WHAT WILL HAPPEN DURING THE STUDY?

If you agree to be in the study, you will do the following things:

- You and your child to participate in 9-weekly 60-minute sessions that will take place during your regularly scheduled early intervention sessions.
- The study sessions will include the primary researcher, Hannah Stoll, and your typical Kids Only, Inc. therapist.
- You will be asked to participate in an assessment of your child's current levels of participation in activities such as play, socialization, walking and crawling, picking up toys, and others.
- You will also participate in a questionnaire regarding your child's sensory processing. Sensory processing is how your brain receives messages from your senses and responds.
- Sessions will focus on ways to help your child participate in activities that are important to you and your family. Sessions will also include new activities to allow your child to learn in a sensory rich environment such as exploring new sights, sounds, and textures through play.

WHAT ARE THE RISKS OF TAKING PART IN THE STUDY?

While participating in the study, the risks, side effects, and/or discomforts include:

- *Risk of physical or emotional discomfort when trying new activities for both you and your child.*
- *Risk of loss of confidentiality of assessment results for both you and your child.*
- *Risk of feelings of sadness or frustration when trying to reach therapy goals for both you and your child.*

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The following measures will be taken to minimize the risks listed above:

- While participating in activities children will be monitored for signs of distress or discomfort. Activities causing distress will be immediately stopped and soothing techniques will be incorporated.
- All activities will be completed with parent/guardian present. Parent/guardian input will be requested throughout sessions and parent/guardian can request to stop or pause activities at any time.
- Data will be stored in a secure on-line database and paper documents will be kept in a locked office.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THE STUDY?

The benefits to participation in the study that are reasonable to expect may include **learning new ways to support your child's growth and development, learning about your child's sensory processing and how to help your child learn through sensory exploration, and working towards goals you develop as a parent/guardian. Your child will have the opportunity to engage in play and learning activities with you and his/her therapy team.**

Information from this study may benefit other people now or in the future by helping us learn the best ways to provide therapy services to toddlers with development disabilities.

WILL I RECEIVE MY RESULTS?

If you participate in this study, we may learn things about you and your child from the study activities that could be important or interesting to you. We will share some of that information with you. Depending on the information, you might need to meet with professionals with expertise to help you learn more about next steps. The study team/study will not cover the costs of any follow-up consultations or actions. We will share the following information with you:

- Any information that might be immediately critical to your child's health and development will be shared with you or your early intervention care provider.
- We will share information with you regarding your child's sensory processing. This information is NOT to be used as a diagnosis and is provided to better understand your child's development and behavior. Any concerns that may develop regarding your child's sensory processing should be shared with your family physician and/or early intervention service provider.

HOW WILL MY INFORMATION BE PROTECTED?

Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. No information which could identify you will be shared in publications about this study.

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Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional Review Board or its designees, and any state or federal agencies who may need to access your medical and/or research records (as allowed by law).

WILL MY INFORMATION BE USED FOR RESEARCH IN THE FUTURE?

Information for this study may be used for future research studies or shared with other researchers for future research. If this happens, information which could identify you will be removed before any information is shared. Since identifying information will be removed, we will not ask for your additional consent.

WILL I BE PAID FOR PARTICIPATION?

You will not be paid for participating in this study.

WILL IT COST ME ANYTHING TO PARTICIPATE?

There is no cost to you for taking part in this study.

WHO WILL PAY FOR MY TREATMENT IF I AM INJURED?

In the event of physical injury resulting from you or your child's participation in this study, necessary medical treatment will be provided to you or your child and billed as part of your medical expenses. Costs not covered by your health care insurer will be your responsibility. Also, it is your responsibility to determine the extent of you or your child's health care coverage. There is no program in place for other monetary compensation for such injuries. However, you are not giving up any legal rights or benefits to which you are otherwise entitled.

If you are participating in research that is not conducted at a medical facility, you will be responsible for seeking medical care and for the expenses associated with any care received.

WHO SHOULD I CALL WITH QUESTIONS OR PROBLEMS?

For questions about the study, contact the researcher, Hannah Stoll, at (812) 787-1181.

For questions about your rights as a research participant, to discuss problems, complaints, or concerns about a research study, or to obtain information or to offer input, please contact the IU Human Subjects Office at 800-696-2949 or at irb@iu.edu.

CAN I WITHDRAW FROM THE STUDY?

If you decide to participate in this study, you can change your mind and decide to leave the study at any time in the future. The study team will help you withdraw from the study safely. If

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you decide to withdraw, please contact Hannah Stoll via telephone (812) 787-1181 or email hstoll@iu.edu.

Your participation may be terminated by the investigator without regard to your consent in the following circumstances: If parent/therapist scheduling does not allow for completion of the 9 weekly sessions within 13 weeks total or your child is discharged from early intervention with Kids Only, Inc. for circumstances unrelated to this study.

SENSORY-BASED PARENT COACHING**PARTICIPANT'S CONSENT**

In consideration of all of the above, I give my consent to participate in this research study. I will be given a copy of this informed consent document to keep for my records. I agree to take part in this study.

Participant's Printed Name: _____

Participant's Signature: _____ **Date:** _____

Printed Name of Person Obtaining Consent: _____

Signature of Person Obtaining Consent: _____ **Date:** _____

In consideration of all the above, I give permission for my child to participate in this research study. I will be given a copy of this informed consent document to keep for my records. I agree for my child to take part in this study.

Printed Name of Parent/Guardian: _____

Signature of Parent/Guardian: _____ **Date:** _____

SENSORY-BASED PARENT COACHING

Appendix F

Sensory Processing Overview for Parents

- <https://pathways.org/topics-of-development/sensory/>
 - This resource is great place to start for parents and multidisciplinary providers who are not familiar with sensory processing and development. Includes videos of sensory development and signs of sensory processing challenges indicating the need for an OT consultation/referral.

Co-regulation Introduction for Providers and Parents

- http://dhss.alaska.gov/abada/ace-ak/Documents/Co-Regulation_Duke.pdf
 - This slideshow provides an explanation of co-regulation for multidisciplinary providers and parents/caregivers with cognitive, environmental, and interpersonal strategies that can be used to support children with and without sensory processing challenges. Slides 14 and 15 can be given to parents when explaining co-regulation as they are specifically geared towards infants and toddlers.

Heavy Work Ideas for Parents

- <https://yourkidstable.com/heavy-work-activities/>
 - This site gives an excellent explanation of proprioception and lists some great home activities for toddlers. It includes chores, mealtime, and play activities.

Parent and Provider Materials for Self-Care Activities

- <https://www.aota.org/-/media/Corporate/Files/AboutOT/consumers/Youth/Establishing-Toileting-Routines-for-Children-Tip-Sheet.pdf>
 - Helpful tips for any parent interested in beginning potty training.
- <https://www.arktherapeutic.com/ark-university/>
 - The Ark Therapeutics Expert Tips section has lots of helpful oral motor and oral sensory ideas for feeding therapists and parents.

Sensory Books for Providers and Parents

- Sideman, S., Kane-Wineland, M., & Henry, D. (2015). *Tools for Infants: Sensory-Based Strategies for Parents, Caregivers, and Early Intervention Providers*
 - This book is designed to help infants feel “sensory safe” while promoting healthy development. It has helpful checklists and movement activities for “cautious cuties” as well as instructions for a short infant massage routine.
- Ayers, J. (2005). *Sensory Integration and the Child, 25th Anniversary Edition*. Pediatric Therapy Network.
 - This book gives a complete overview of sensory processing theory and the new edition includes lots of helpful “Tips for Parents” pages on topics including gravitational insecurity, tactile defensiveness, and motor planning. This book is geared towards OTs or parents looking to gain in-depth knowledge.

Resources provided to parent/caregivers should be individualized to meet needs and reviewed during therapy sessions to ensure safety and proper application of strategies.

SENSORY-BASED PARENT COACHING

Appendix G Provider Survey of Family Routines

The purpose of this worksheet is to identify areas of your family's routine in which your child wants or needs to do activities but cannot do them, will not do them, or could do them better. These areas are referred to as challenging routines. The worksheet lists several categories of potentially challenging routines. After identifying challenging routines, you will rate how important it is for your child to perform better in that area. A challenging routine that is rated as very important to your family will be prioritized throughout therapy sessions. Infants and toddlers grow and develop rapidly, so this worksheet may be used throughout your time in First Steps to update your family's priorities.

Self-Care (Examples of skills and routines include: eating/feeding, initiating requests to indicate wants and needs, toileting, dressing, bathing, toothbrushing, and sleeping)

Routines my child does well:

Challenging routines:

Importance
1= Least Important. 5= Most Important

_____	1 2 3 4 5
_____	1 2 3 4 5
_____	1 2 3 4 5

Community Participation (Examples of skills and routines include: transitions in/out of car, daycare drop-off, grocery trips, self-regulation in the community, following directions for safety at parks/playgrounds, play groups)

Routines my child does well:

Challenging routines:

_____	1 2 3 4 5
_____	1 2 3 4 5
_____	1 2 3 4 5

Household Management (Examples of skills and routines include: picking up toys, helping with simple chores, following 1-step directions, transitioning between rooms and managing stairs, social interactions with parents and siblings)

Routines my child does well:

SENSORY-BASED PARENT COACHING

Challenging routines:

_____	1 2 3 4 5
_____	1 2 3 4 5
_____	1 2 3 4 5

Play (Examples of skills and routines include: sharing toys with siblings, taking turns, functional play, joint attention to family while playing, accessing toys, imitating play actions/songs, requesting toys or to initiate play, tummy time)

Routines my child does well:

Challenging routines:

_____	1 2 3 4 5
_____	1 2 3 4 5
_____	1 2 3 4 5

In this section your therapist will list strengths and barriers to your child's participation in the discussed routines. These may include environmental and personal factors. Examples may include but are not limited to functional mobility and gross motor skills (PT), cognitive, developmental, and overarching skills (DT), sensory processing and fine motor skills (OT) and speech-language and oral motor skills (SLP). The "things to work on" section includes agreed upon priorities for therapy.

Strengths

Barriers

Things to Work On

Acknowledgement: Canadian Occupational Performance Measure was utilized in developing the concept and categories for this worksheet. Law M., Baptiste, S., Carswell, A., McColl, MA., Polatajko, H. & Pollock, N. (2014) *Canadian Occupational Performance Measure Manual, 5th Edition*. CAOT Publications ACE.